Name of Course	**DATA STRUCTURE AND ALGORITHMS**	Course Code	**CSEB3213/CSNB344**
Lab Tutor	**DR AZHANA AHMAD**	Semester	**SEM 1 2023/24**

Student Names	Muhammad Izzat Fikri Bin Zurilan	Danial Hakim
ID s	SW01082295	SW0103116
SECTION	02A	
Date	12/11/2023	

Assessment	Assignment 1 (Duo)
Weightage	2%
Course Outcome to achieve	CLO2: Produce a computing solution by applying appropriate data structures and algorithms. (C3,PLO2)

Instructions

1. This is a duo lab exercise.
2. You are compulsory to choose **ANY** 2 questions.
3. Submit your complete **cpp** programs, **with sample of output** via Brighten (only one person submitted)
4. Do attach this code segment in all files:

```
/*Subject code : CSEB3213/CSEB324/CSNB344 Data Structure & Algorithms
  Section      : 02A
  Student name : XXX
  Student ID no: XXX
  Question no  : XXX */
```

LEVEL: EASY

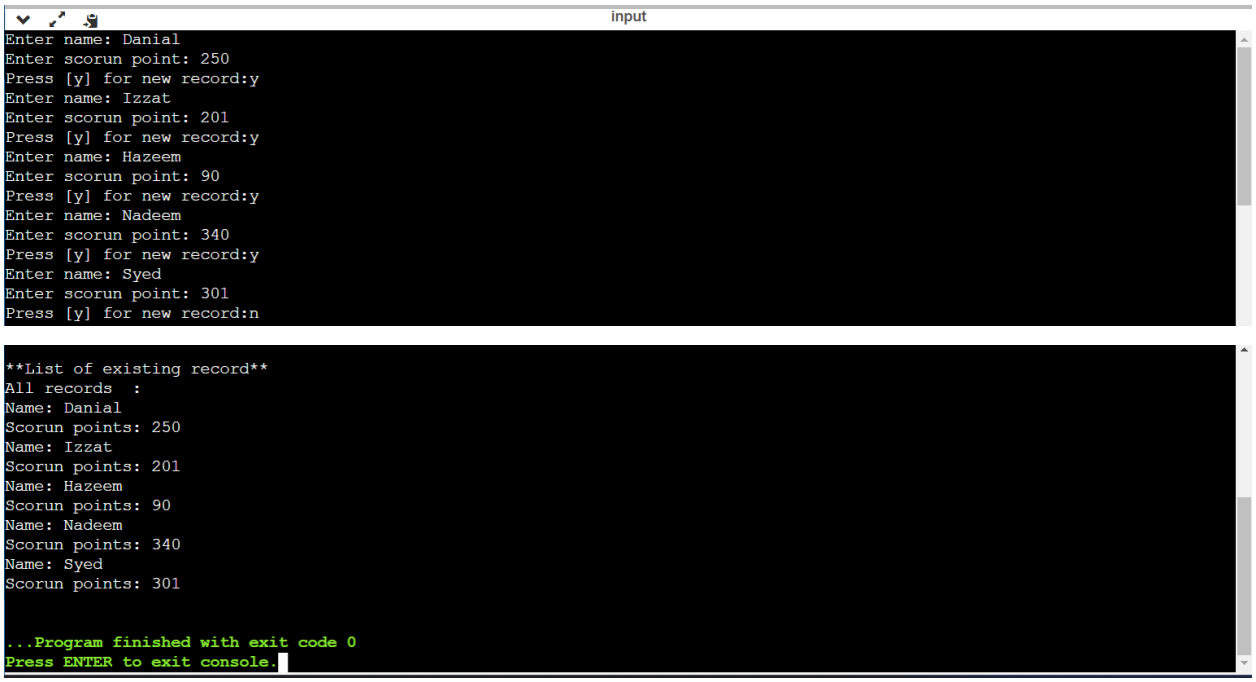
Question 1

The following program contains errors and incomplete.

```
#include <iostream>
using namespace std;

class scorun {
    public:
    string name;
    int point;
    //missing code
};


scorun *createScorun() {
    scorun *n = new scorun();
    //missing code
}

void insertNode(/*suitable parameter*/) {
    //variable declaration

    do{
        n = createScorun ();

        //insert first node into linked list
        //missing code

        //insert second node onwards at the end of linked list
        else {
            //missing code
        }

        cout<<"Press [y] for new record:";
        cin>>choice;
    }while(choice=='y');
}

void display(/*suitable parameter*/) {
    cout<<"All records  : ";
    //missing code
}

int main() {
    scorun *head = NULL;
    insertNode(/*suitable argument*/);
    cout <<"\n**List of existing record**"<<endl;
    //call display()
    //call analysis()
    return 0;
}
```

a) Complete the program above with correct code.

Sample output:



b) Modify the program by adding function **analysis()**. The function shall display total no of students with low scorun point (less than 300) together with the student details based on data in the linked list.

Sample output: